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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,420	11/29/2001	Rajendran Rajan	123097.100	6438

7590 02/27/2003

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EXAMINER

LEE, CHI HO A

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,420

Applicant(s)

RAJAN ET AL.

Examiner

Andrew Lee

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9, 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Derby et al U.S. Patent Number 5,398,012.

Re Claims 1, 10, fig 3 teaches plurality of sub-networks 11 and 12 (individual areas in a domain) wherein AA1.3 of receives the best routes information (topology information) from MAG1 and MAG2 (receiving topology information) (See col. 5, lines 28 +); from the best route information from sub-networks 11 and 12, AA1.3 determines the least cost paths (identifying a plurality intra-area least cost) (See col. 6, lines 33-53); wherein determining the best route concatenating (assembling a subset of plurality paths) the route from source to destination.

Re Claims 2, 11, refer to Claim 1, wherein the concatenating route includes series links via routers.

Re Claims 3, 12, refer to Claim 1, wherein AA1.3 identifies the local route information (cost path between start address to at least one exit point) from access agents AA.1, AA1.2 (one exit point) to the source ESA (starting address) in sub-network 11 (first area) for interconnecting to the sub-network 12, wherein the local route

information determines the best local path from the access points to source ESA (selecting at least one of cost path in area one).

Re Claims 4, 8, refer to Claim 3, wherein the AA1.3 transmits the queries messages to AA1.1 and AA1.2 (destination address).

Re Claims 5, 9, 13, refer to Claim 3, after AA1.3 determines the best local route from the source, sends a FIND message to AA2.1, AA2.2, AA2.3 (exit points) at MAG2 of sub-network 12 (a second area), wherein the FIND message received at AA2.1, AA2.2, AA2.3 determines the best route from each to the destination ESB, once determines, a FOUND message is transmitted to the AA1.3 to determines the best route from ESA in MAG1 to ESB in MAG2 (constructing and selecting the at least one least cost path).

Re Claim 6, refer to Claim 4, wherein the AA1.3 transmits the FIND messages to AA2.1, AA2.2, and AA2.3 (destination address).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derby et al U.S. Patent Number 5,398,012.

Re Claims 7 and 14, Derby et al fails to explicitly teach “second constructing and selecting step are repeated for one or more additional areas”. Examiner takes official

notice that networks are expandable to include additional areas. Fig. 6B teaches step 78 teaches sending "FIND" message to AAs in search groups. One skilled in the art would recognize that the search groups would include the existing sub-networks and the newly additional network. One skilled in the art would have been motivated when a new sub-network are added to an existing networks, selecting the best route includes routing information from all existing routes. Therefore, it would have been obvious to one ordinary skilled select/construct the least cost path from all existing paths.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Derby et al U.S. Patent Number 5,398,012 in view of Arrowood et al U.S. Patent Number 5,101,348.

Re Claim 18, refer to Claim 1, the received ARP(s) (list of routing events) is processed by method steps of fig 6A. These steps teach a method of providing a routing information from access points within sub-network and intra-sub-network for constructing the best path between the sub-networks. Derby et al fails to explicitly teach updating the routing information in accordance with a next routing event. Arrowood et al teaches updating the routing database to indicate the current topology (See abstract). One skilled in the art would have motivated to use current information in the database in determining the best route. Therefore, it would have been obvious to one ordinary skilled incorporate the teaching of Arrowood et al into the teaching of Derby et al.

It is inherent repeat the constructing and updating process until all the ARP requests have been completed.

Allowable Subject Matter

6. Claims 15-17 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to teach the step for each of the time-stamped routing information contexts, constructing a time ordered list of routing events as the events are received over time until the next time instant identified in the identifying step.

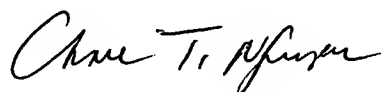
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



AI
February 19, 2003



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SUPERVISORY PATENT EXAMINER
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